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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,905	06/04/2001	Toshio Kuroiwa	24673	2128

7590 09/03/2004

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EXAMINER	
BAUM, RONALD	
ART UNIT	PAPER NUMBER
2136	3

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/871,905	KUROIWA, TOSHIO	
	Examiner	Art Unit	
	Ronald Baum	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-3 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-3 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1- 3 are pending for examination.

2. Claims 1- 3 are rejected.

Claim Objections

Claim 2 is objected to because of the following informalities: The second element in the claim recites the phrase "...the second control wor***k***..." whereas the phrase should be "...the second control wor***d***...". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Park, U.S. Patent 5,689,559.

4. As per claim 1; "A master digital data creation device [figures 1-5 and accompanying descriptions, col. 11,lines 16-col. 16,line 18] comprising: an encryption block generating a first control word based on a specified allowable number of reproductions [i.e., copy prevention] and applying a one-way function to the first control word the allowable number of reproductions to generate a second control word [col. 1,lines 57-col. 11,line 14, whereas the marker generation/encryption clearly encompasses the "specified allowable number of reproductions" and the encryption process is key

based and is broadly interpreted by the examiner to encompass one way functionality.]; a scrambler receiving the second control word for scrambling desired first digital data using the second control word to produce second digital data [col. 1,lines 57-col. 11,line 14, whereas the marker generation/encryption/scrambling clearly encompasses the digital data scrambled functionality.]; and an output block outputting the second digital data and the first control word to an external device [col. 1,lines 57-col. 11,line 14, whereas the multiplexing (i.e., figure 1) clearly encompasses the outputting data and control information externally.].".

5. As per claim 2; "A digital data reproduction device [figures 2-5 and accompanying descriptions, col. 11,lines 16-col. 16,line 18] comprising: an acceptor accepting recording media on which second digital data and a first control word CWk are recorded, said first control word being generated based on a specified allowable number of reproductions [i.e., copy prevention], said second digital data being generated by scrambling desired first digital data using a second control word CWo generated by applying a one-way function to the first control word CWk k times [col. 1,lines 57-col. 11,line 14, whereas the marker generation/encryption/demultiplexing/decryption, etc., clearly encompasses the "specified allowable number of reproductions" and the encryption/decryption process is key based and is broadly interpreted by the examiner to encompass one way functionality.]; a decryption block receiving the first control word CWk and applying the one-way function to the first control word CWk k times to produce the second control work CWo; a de-scrambler receiving the second digital data and the second control word CWo and de-scrambling the second digital data using the

second control word CWo to produce the first digital data [col. 1,lines 57-col. 11,line 14, whereas the marker generation/encryption/scrambling/demultiplexing/decryption, etc., clearly encompasses the digital data de-scrambled functionality.]; and a reproduction unit reproducing the first digital data generated by said de-scrambler, wherein, after the reproduction by said reproduction unit, said decryption block writes a third control word CW(k-1) back to said recording media, said third control word CW(k-1) being generated by applying the one-way function to the first control word CWk once, and wherein, if the first control word CWk received from the recording media equals the second control word CWo, the de-scrambling by said de-scrambler and the reproduction by said reproduction unit are inhibited [col. 1,lines 57-col. 11,line 14, whereas the process of verifying authority to copy, etc., is clearly iterative from data transfer to data transfer.].".

6. Claim 3 ***additionally recites*** the limitation that; "The digital data reproduction device according to claim 2, wherein, when a desired number of reproductions, n, is received from some other reproduction device, said decryption block receives the first control word CWk from the recording media and, if k >= n, applies the one-way function to the first control word CWk (k-n) times to produce the third control word CWn and applies the one-way function to the first control word CWk n times to produce the fourth control word CW(k-n); if k<n, produces the first control word CWk as the third control word CWn and produces the second control word CWo as the fourth control word CW(k-n) ; and records the fourth control word CW(k-n) on the recording media for updating, further comprising: an output block outputting the second digital data recorded on the recording media., and the third control word CWn obtained from the decryption block, to

the other reproduction device.". The teachings of Park suggest such limitations (figures 1-5 and accompanying descriptions, col. 1,lines 57-col. 16,line 18, whereas the process of verifying authority to copy, etc., is clearly iterative from data transfer to data transfer, and further, the copy protection/ desired number of reproductions criteria is clearly application specific to the environment (i.e., "rental" media, or signal over the air transmission/reception).).

Conclusion

7. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (703) 305-4276. The examiner can normally be reached Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached at (703) 305-9648. The Fax number for the organization where this application is assigned is 703-872-9306.

Ronald Baum

Patent Examiner

AYAZ SHEIKH
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